

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

1-42. (canceled)

43. (new) A recombinant vector comprising:

(A) lactic acid bacterial DNA;

(B) a gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon; and

(C) a replicon making said vector capable of replicating in a lactic acid bacterium, wherein (a) said gene is (i) obtained from the chromosome of a lactic acid bacterium and (ii) under the control of a regulatable promoter, and (b) said vector lacks a gene coding for antibiotic resistance.

44. (new) The vector according to claim 43, wherein said regulatable promoter is a heterologous promoter.

45. (new) A recombinant vector comprising:

(A) lactic acid bacterial DNA;

(B) a gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon; and

(C) a replicon making said vector capable of replicating in a lactic acid bacterium, wherein (a) said suppressor results from at least one change, preferably two or three changes, of nucleotide in said anticodon, and (b) said vector lacks a gene coding for antibiotic resistance.

46. (new) A recombinant vector that is selected from a group consisting of pFG 100 deposited under the accession No. DSM 12091, and pFG200 deposited under the accession No. DSM 12108.

47. (new) A recombinant vector comprising:

(A) lactic acid bacterial DNA;

(B) a first gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon;

(C) a replicon making said vector capable of replicating in a lactic acid bacterium;

(D) a second gene coding for a desired gene product,

wherein (a) said vector lacks a gene coding for antibiotic resistance, and (b) said gene product confers bacteriophage resistance to a lactic acid bacterial host cell.

48. (new) A recombinant vector comprising:

(A) lactic acid bacterial DNA;
(B) a first gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon;

(C) a replicon making said vector capable of replicating in a lactic acid bacterium;

(D) a second gene coding for a desired gene product,

wherein (a) said vector lacks a gene coding for antibiotic resistance, and (b) said gene product is a bacteriophage lysin.

49. (new) The vector according to claim 48, wherein the gene coding for said bacteriophage lysine is obtained from the bacteriophage ØvML3 as contained in DN209/pFG7 deposited under the accession No. DSM 12089.

50. (new) A recombinant vector comprising:

(A) lactic acid bacterial DNA;
(B) a first gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon;

(C) a replicon making said vector capable of replicating in a lactic acid bacterium;

(D) a second gene coding for a desired gene product,

wherein (a) said vector lacks a gene coding for antibiotic resistance, and (b) said gene product is a part of the nisin synthesis pathway or nisin resistance.

51. (new) A lactic acid bacterium comprising a recombinant vector, wherein said vector comprising:

(A) lactic acid bacterial DNA;

(B) a gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon; and

(C) a replicon making said vector capable of replicating in a lactic acid bacterium, wherein (a) said vector lacks a gene coding for antibiotic resistance, (b) said suppressor suppresses a nonsense mutation (i) that confers auxotrophy in the absence of a nonsense suppressor capable of suppressing the mutation, and (ii) that is in a gene involved in the synthesis of pyrimidine nucleotides.

52. (new) The lactic acid bacterium according to claim 51, wherein said nonsense mutation is in a *pyr* gene.

53. (new) A lactic acid bacterium (i) that is *Lactococcus lactis* subsp. *lactis* strain FA4-1-1 containing pFG100, deposited under the accession No. DSM 12091 or *Lactococcus lactis* subsp. *lactis* strain CHCC4146 containing pFG200, deposited under the accession No. DSM 12108, and (ii) that comprises a recombinant vector, wherein said vector comprises:

- (A) lactic acid bacterial DNA;
- (B) a gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon; and
- (C) a replicon making said vector capable of replicating in a lactic acid bacterium, wherein said vector lacks a gene coding for antibiotic resistance.

54. (new) A composition comprising (i) an isolated pure culture of a lactic acid bacterium, and (ii) a carrier, wherein (A) said composition contains at least 10^5 colony forming units of the lactic acid bacterium per gram composition, and (B) said bacterium comprises a recombinant vector that comprises:

- (a) lactic acid bacterial DNA;
- (b) a gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon; and
- (c) a replicon making said vector capable of replicating in a lactic acid bacterium, wherein said vector lacks a gene coding for antibiotic resistance.

55. (new) A method for stably maintaining a recombinant vector in lactic acid bacterial host cells, growing in a particular environment, which method comprises:

- (A) providing nonsense mutant cells that are auxotrophic lactic acid bacterial cells, which cannot grow in said environment and which carry a *pyr* mutation; and
- (B) producing said host cells by transforming said nonsense mutant cells with a vector that lacks a gene coding for antibiotic resistance and that comprises (i) lactic acid bacterial DNA, (ii) a gene coding for an amber suppressor that is a tRNA comprising the CUA anticodon, and (iii) a replicon that makes said vector capable of replicating in a lactic acid bacterium, such that said host cells do not grow if they lose said vector.